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08/581,669

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/581,669	12/29/95	GUIBAS	L D/95473

24M1/0529

EXAMINER

CHEN, J

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ART UNIT

PAPER NUMBER

2412

8

DATE MAILED: 05/29/97

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
08/581,669

Applicant(s)
Guibas et al.

Examiner
Jennifer C. Chen

Group Art Unit
2412



☒ Responsive to communication(s) filed on Dec 29, 1995

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-15 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-15 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☒ The drawing(s) filed on Dec 29, 1995 is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2, 6, 7

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

DETAILED ACTION

Preliminary Amendments

1. Preliminary amendments A and B, filed on April 23, 1996, and May 31, 1996, respectively, have been incorporated into the application.
2. Claims 1-12 were pending; claims 13-15 have been added. Claims 1-15 are now pending.

Information Disclosure Statement

3. The information disclosure statement filed on December 29, 1995 fails to comply with the provisions of MPEP § 609 because only the odd numbered pages are provided for reference AW (Guibas et al.). It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements. See MPEP § 609 ¶ C(1).

Drawings

4. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Specification

5. The title of the invention is not descriptive. A new title that is clearly indicative of the invention to which the claims are directed is required.

Claim Objections

6. Claims 2 and 8 are objected to because of the following informalities:

- claim 2, line 9, "... deleting the at least one fragment..." Is "the" extraneous?
- claim 8, line 6, "... adding the at least one fragment..." Is "the" extraneous? Appropriate correction is required.

Claim Rejections - 35 U.S.C. § 112

7. Claims 13-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per independent claim 13, the preamble recites "[a]n article of manufacture for use by a processor-controlled machine... the machine including... a processor for receiving... accessing..." However, the claim continues to recite "... the article comprising... the processor...receiving...; the processor... accessing...; the processor... determining...; the processor... performing...; the processor... adding...; the processor storing..." Thus, the preamble of claim 13 conveys that the processor is a component of the processor-controlled machine, which uses what is claimed, namely, the article of manufacture. As such, the processor is not a

component of the claimed article of manufacture. Because the processor is not a component of the claimed article of manufacture, reciting the functions that the processor performs, as limitations in the body of the claim for an article of manufacture, renders the claim vague and indefinite.

As per claims 14-15, they are rejected for similar reasons as above and because they depend on rejected independent claim 13.

Claim Rejections - 35 U.S.C. § 101

8. 35 U.S.C. § 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 1-15 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter, namely, an abstract idea.

Independent claim 1 recites a “method for operating a processor-controlled machine to dynamically produce an output partition data structure...” but no physical changes occur. Instead, the method merely manipulates abstract ideas or solves a purely mathematical problem without any limitation to a practical application. Thus, independent claim 1 recites an abstract idea, which is not a statutory class that is eligible for patent protection. The applicant is suggested to include limitations reciting that the method is to be performed on a computer to affect pre- or post-computer processing activities to achieve a practical application. As per claims 2-12, they

are rejected for the same reason. Claims 13-15 are similarly directed to the same abstract idea as claims 1-12, because no details of manufacture are disclosed (e.g. specific code or program instruction means). Thus, claims 13-15 are similarly rejected as claims 1-12.

Conclusion

10. Claims 1-15 are not disclosed by the prior art of record. As the prior art indicates, although Mulmuley's algorithm for verticle cell decomposition is dynamic, it assumes the infinite-precision of real coordinates; and despite that Green-Yao explored rounding operations to perturb intersections of line segments to finite or integer grids, these operations produce a large number of breaks that create complex partitions in a dynamic environment. The claims, however, would not be allowable unless Applicant overcomes the rejections set forth in this action.


11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Gangnet et al., U.S. Pat. No. 5,574,839, issued 11/12/96, filed 02/14/94, 395/142,
Method and apparatus for automatic gap closing in computer aided drawing.

Onitake et al., U.S. Pat. No. 5,506,948, issued 4/9/96, filed 6/14/94, 395/138,
Topology maintaining geometric data correcting method and system employing same.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Chen, whose telephone number is (703) 305-4643. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon,

can be reached at (703) 305-9701. The fax number for Art Unit 2412 is (703) 305-9724; faxed correspondences should be clearly labeled as "Informal," "Draft" or "Official." Any inquiry of a general nature or relating to the status on this application should be directed to the Group receptionist, whose telephone number is (703) 305-3900.


Jennifer C. Chen
Patent Examiner, Art Unit 2412
May 22, 1997


MARK K. ZIMMERMAN
PRIMARY EXAMINER
GROUP 2400